ABSTRACT OF THE DISCLOSURE

A voltage conversion circuit alternately controls ON/OFF of a PMOS transistor and an NMOS transistor that are provided in series between high voltage power source lines, and outputs a low voltage obtained by causing a filter circuit to smooth an output voltage of each transistor. Further, the voltage conversion circuit uses the output voltage of the filter circuit as a power source of an output pulse signal generating circuit for driving the two transistors. Further, the voltage conversion circuit causes a start-up signal generating circuit to generate a start-up signal for forcing the PMOS transistor to turn ON during a predetermined period on start-up, and causes a switch control circuit to select the start-up signal instead of the pulse signal from the output pulse signal generating circuit, thereby realizing sure start-up.